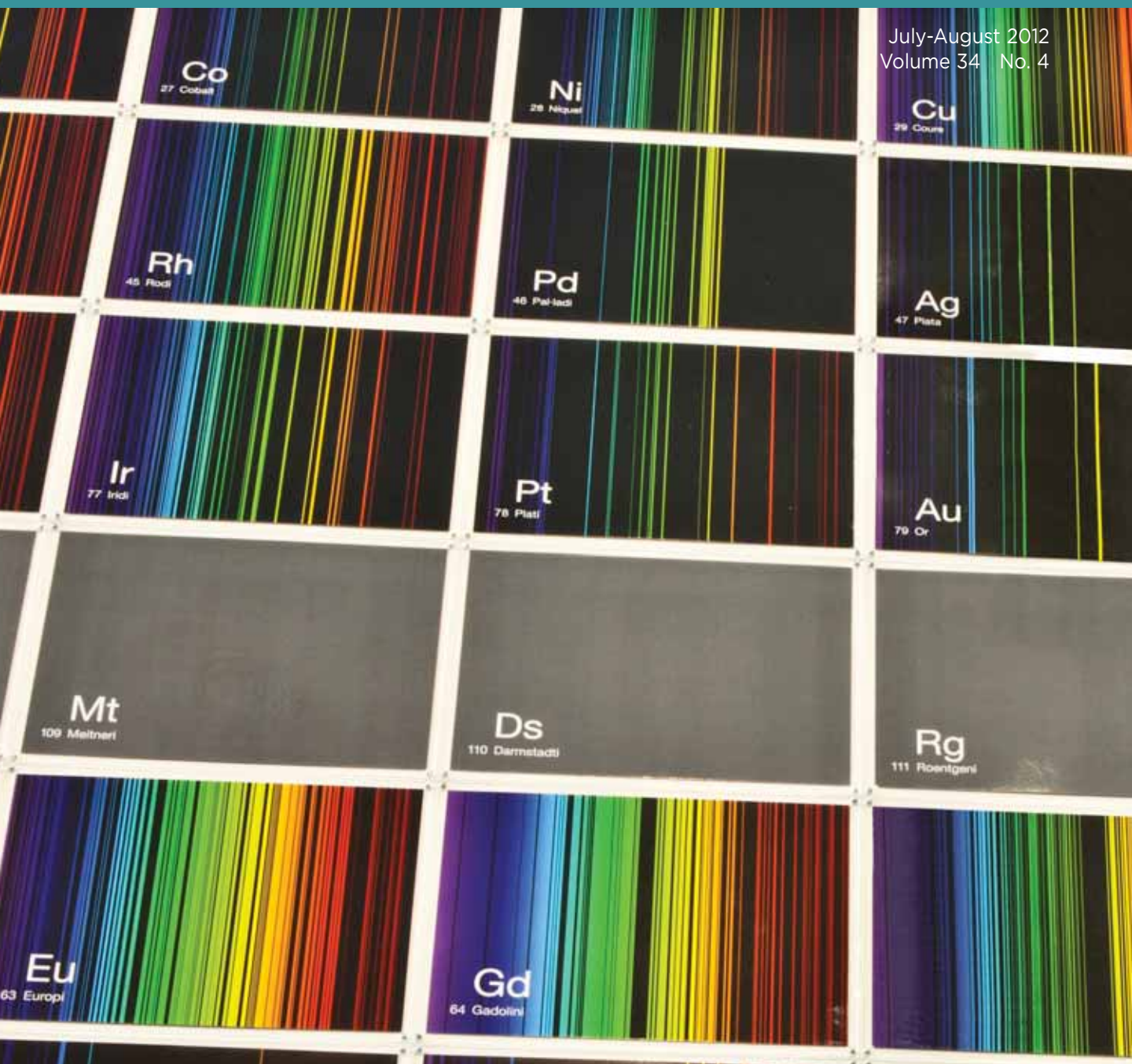


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An Artist's Hommage to the Elements

by Santiago Alvarez

The School of Chemistry of the University of Barcelona culminated the celebration of the International Year of Chemistry (IYC) with the installation of *Hommage to the Elements* in the atrium of the Physics and Chemistry Library. It is placed right above the printed collection of *Chemical Abstracts*, a monumental compendium of twentieth-century chemistry, and under the large windows through which percolate the lively human activity of the campus. *Hommage to the Elements*, the work of multimedia artist Eugènia Balcells, is an invocation of the foundations of the universe and of life: matter and energy, light, and the chemical elements. It takes the shape of a periodic table in which each element is represented by a collection of lines from its emission spectra and combines two of the best known icons of science or, as some like to say, constitutes the bar code of Nature.

Hommage to the Elements was born as a counterpoint to the multimedia exhibition *Frequencies*, presented for the first time by Balcells in Barcelona in 2009. Through the collaboration of the artist's workshop with physicists and chemists from the University of Barcelona, and thanks to the sponsorship of chemical companies Solvay and BASF and the support of the Catalan Societies of Physics and Chemistry, 20 copies of the wall installation were produced to commemorate the IYC. A poster of the exhibit was also produced.

Born in Barcelona, Eugènia Balcells has developed a wide trajectory in the fields of conceptual art, experimental film-making, and multimedia installations in New York and Barcelona. Her work was recognized in


2010 with the Visual Arts prize of the Catalan government, and with the medal of Fine Arts by the Spanish government.

The wall installation of *Hommage to the Elements* offers both scientists and nonscientists the opportunity to reflect on historical and philosophical aspects of chemistry. One obvious question many people pose when faced with it is, why do elements 100 (fermium) to 112 (copernicium) appear as empty gray boxes? These are the artificial elements for which emission spectra are as yet unknown, because these "atoms are brief, a game of inventiveness that lasts just long enough to deserve a name and vanishes," in the words of

poet and physicist David Jou.

For chemists, this spectral periodic table invokes our ancestors, such as Bunsen, Kirchhoff, Seaborg, Mendeleev, Davy, Priestley, Lavoisier, Ramsay, Curie, and many others. Both chemists and nonchemists may recall the artists that taught us new ways of seeing color, such as Mark Rothko or Anish Kapoor, or those who theorized on light and color, such as Newton, Ostwald, Goethe, Delacroix, or Josef Albers. It may also make us think about writers such as Howard Phillips Lovecraft, who wrote about a mysterious substance: "when upon heating before the spectroscope it displayed shining bands unlike any known colors of the normal spectrum. There was much breathless talk of new elements, bizarre optical properties, and other things which puzzled men of science are wont to say when faced by the unknown."

Institutions interested in installing *Hommage to the Elements* should contact the workshop of Eugènia Balcells. More information on *Frequencies* and *Hommage to the Elements* can be found in <http://araa-horanow.blogspot.com>. To learn more about Eugènia Balcells and her work, visit www.eugenialbalcells.com. Copies of the poster can be ordered through the virtual bookstore of the Institut d'Estudis Catalans: <http://publicacions.iec.cat>.

Balcells' *Hommage to the Elements* is featured on the cover of this issue of *Chemistry International*. 

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